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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,069	01/28/2002	Keiichi Kitagawa	L9289.02107	8765
24257	7590	11/28/2005	EXAMINER	
STEVENS DAVIS MILLER & MOSHER, LLP			PATEL, AJIT	
1615 L STREET, NW			ART UNIT	
SUITE 850			PAPER NUMBER	
WASHINGTON, DC 20036			2664	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

ck

<b>Office Action Summary</b>	<b>Application No.</b> 10/048,069	<b>Applicant(s)</b> KITAGAWA ET AL.	
	<b>Examiner</b> AJIT G. PATEL	<b>Art Unit</b> 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-10 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3 pages</u> . | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1, 8, 9 and 10 are objected to because of the following informalities: In claim 1, line 6, "a plurality of streams" should be changed to --said plurality of streams--. Same error appears in claims 8-10. Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4,6-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Verma (U.S. Pat. # 6,757,299).

Regarding claims 1,8-10, Verma discloses a peak power to average power ratio reduction in multicarrier communication systems using error correcting code comprising converting means for converting a single information signal stream to a plurality of streams of information signals (100 of fig. 1); generating means for generating a multicarrier signal by superimposing a plurality of streams of information signals respectively on stream-specific carrier waves (400 of fig. 1; 2300 of fig. 2); peak power detecting means for detecting peak power of said multicarrier signal (500 of fig. 1; 2400 of fig. 2); and re-generating means for, when said peak power exceeds a threshold value, superimposing a signal for suppressing peak power instead of an information

signal on a specific carrier wave among said carrier waves and re-generating the multicarrier signal at the time said peak power exceeded the threshold value (300, 600 of fig. 1; 2500, 2600 of fig. 2).

Regarding claim 2, Verma discloses the limitation wherein said converting means executes error correction coding processing on an information signal of a predetermined stream among said plurality of streams of information signals (200 of fig.1; 2100 of fig. 2); and said generating means superimposes the information signal of each stream subjected to error correction coding processing on a stream-specific specific carrier wave (300 of fig. 1; 2600 of fig. 2).

Regarding claim 3, Verma discloses the limitation wherein said re-generating means uses at least one carrier wave selected from among all carrier waves as a specific carrier wave (300 of fig. 1; 2600 of fig. 1).

Regarding claim 4, Verma discloses the limitation wherein said re-generating means uses a random signal as a signal for suppressing peak power (lines 5-16, col. 2; lines 5-25, col. 5).

Regarding claim 6, Verma discloses the limitation wherein said re-generating means uses a signal for which amplitude is generally zero as a signal for suppressing peak power (col. 6, line 1 through line 39, col. 8).

Regarding claim 7, Verma discloses the limitation "clipping means for performing clipping processing on a multicarrier signal for which peak power exceeds a threshold value among multicarrier signals generated by said generating means" (800 of fig. 1).

4. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AJIT G. PATEL whose telephone number is 571-272-3140. The examiner can normally be reached on MONDAY-THURSDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ajit Patel  
Primary Examiner

AP